AMENDMENTS TO THE CLAIMS

1.   (currently amended) A method for improving video picture processing according to a known scheme,

   wherein the scheme includes n x m intra-block prediction with a prediction direction, where n and m are integers greater than 1,

   wherein the intra-block prediction mode selected in the coding of a block is indicated in the coded bit stream;

   wherein the video pictures are acquired, coded, transmitted, decoded, and displayed;

   the method comprising:

   processing the video pictures according to the known scheme;

   identifying the prediction mode for an n x m block being processed;

   if the prediction mode has a prediction direction and the prediction direction is a [["]]second quadrant direction[["]] or a [["]]fourth quadrant direction,[["]] then processing the block through a filter and if the prediction mode has no prediction direction or a first quadrant direction or a third quadrant direction then not processing the block through the filter, and

   continuing processing the video pictures.

2.   (original) The method in Claim 1, wherein the processing the block through a filter is after the block being decoded according to the selected prediction mode and before the block being displayed.

3.   (original) The method in Claim 2, wherein the filter is a one-dimensional horizontal filter.

4.   (original) The method in Claim 3, wherein the filter is an l-tap FIR filter.

5.   (original) The method in Claim 4, wherein the l-tap FIR filter is a [1/4, 1/2, 1/4] FIR filter.

6.   (original) The method in Claim 2, wherein the filter is a one-dimensional vertical filter.

7.   (original) The method in Claim 2, wherein the filter is a two-dimensional filter.

8.   (original) The method in Claim 1, wherein the known scheme includes a decoding process in compliance with H.264.

9.   (original) The method in Claim 8, wherein the prediction direction is one of the directions of mode 3, mode 7 or mode 8 of the intra-block prediction modes of H.264.

10.   (original) The method in Claim 9, wherein the n x m block is the 4x4 block.

11.   (original) The method in Claim 10, wherein processing the block through a filter is after the block is decoded according to the selected prediction mode.

12.   (original) The method in Claim 11, wherein the filter is a one-dimensional horizontal filter.

13.   (original) The method in Claim 12, wherein the filter is a 3-tap [1/4, 1/2, 1/4] FIR filter.

14.   (original) The method in Claim 11, wherein the filter is a one-dimensional vertical filter.

15.   (original) The method in Claim 11, wherein the filter is a two-dimensional filter.

16.   (original) The method in Claim 10, further comprising:
            processing the 16x16 macroblock through the filter, wherein the 4x4 block is a portion of the 16x16 macroblock.

17.   (currently amended) A method for improving video picture processing according to a known scheme,
            wherein the scheme includes n x m intra-block prediction with a prediction direction, where n and m are integers greater than 1,
            wherein the intra-block prediction mode selected in the coding of a block is indicated in the coded video pictures;
            wherein the video pictures are acquired, coded, transmitted, decoded, and displayed;
            the method comprising:
                processing the video pictures according to the known scheme;
                identifying the quantization parameter;
                identifying the prediction mode for an n x m block being processed;

if the quantization parameter is above a threshold, the prediction mode has a prediction direction and the prediction direction is a [["]]second quadrant direction[["]] or a [["]]fourth quadrant direction,[["]] then processing the block through a filter and if the prediction mode has no prediction direction or a first quadrant direction or a third quadrant direction then not processing the block through the filter, and

continuing processing the video pictures.

18. (original) The method in Claim 17, wherein the processing the block through a filter is after the block being decoded according to the selected prediction mode and before the block being displayed.

19. (original) The method in Claim 18, wherein the filter is a one-dimensional horizontal filter.

20. (original) The method in Claim 19, wherein the filter is an l-tap FIR filter.

21. (original) The method in Claim 20, wherein the l-tap FIR filter is a 3-tap [1/4, 1/2, 1/4] FIR filter.

22. (original) The method in Claim 18, wherein the filter is a one-dimensional vertical filter.

23. (original) The method in Claim 18, wherein the filter is a two-dimensional filter.

24. (original) The method in Claim 17, wherein the known scheme includes a decoding process in compliance with H.264.

25. (original) The method in Claim 24, wherein the prediction direction is one of the directions of mode 3, mode 7 or mode 8 of the intra-block prediction modes of H.264.

26. (original) The method in Claim 25, wherein the threshold is between 20 and 35.

27. (original) The method in Claim 26, wherein the n x m block is the 4x4 block.

28. (original) The method in Claim 27, wherein the processing the block through a filter is after the block being decoded according to the selected prediction mode.

29.   (original) The method in Claim 28, wherein the filter is a one-dimensional horizontal filter.

30.   (original) The method in Claim 29, wherein the filter is a 3-tap [1/4, 1/2, 1/4] FIR filter.

31.   (original) The method in Claim 28, wherein the filter is a one-dimensional vertical filter.

32.   (original) The method in Claim 28, wherein the filter is a two-dimensional filter.

33.   (original) The method in Claim 27, further comprising:
          processing the 16x16 macroblock through the filter, wherein the 4x4 block is a portion
              of the 16x16 macroblock.

34.   (original) A method for improving video picture processing according to a known scheme,
          wherein the scheme includes n x m intra-block prediction with a prediction direction,
              where n and m are integers greater than 1,
          wherein the intra-block prediction mode selected in the coding of a block is indicated
              in the coded bit stream;
          wherein the video pictures are acquired, coded, transmitted, decoded, and displayed;
          the method comprising:
              filtering the video pictures with a filter, wherein the filter is operative to smooth
                  the edges of objects in the pictures, wherein the edges having an orientation
                  in a second quadrant direction or a fourth quadrant direction;
              wherein the filter is operative to leave all other areas of the picture unaffected;
              encoding the video pictures according to the known scheme; and
                  generating bit stream.

35.   (original) The method in Claim 34, wherein the known scheme includes a decoding process in compliance with H.264.

36–37. (cancelled)

38.   (original) A video picture produced by the method in any one of claims 1–17, and 34, and 41.

~~49~~<u>39</u>. (currently amended) A computer system comprising:

    a central processing unit,

    a memory module;

    wherein the central processing unit is operative to perform the method in any one of claims 1–17, ~~and~~ 34<u>, and 41</u>.

40. (currently amended) A computer readable medium containing computer executable program operative to perform the method in any one of claims 1–17, ~~and~~ 34<u>, and 41</u>.

41. (new) A method for improving the quality of video images processed using intra block prediction, the method comprising applying a filter to one or more blocks of the image, wherein the filter reduces artifacts associated with intra block prediction in a second quadrant direction or a fourth quadrant direction and otherwise leaves the block unchanged.

42. (new) The method of claim 41 wherein the filter is applied after decoding.

43. (new) The method of claim 42 wherein the filter is applied prior to encoding.

44 (new) The method of claim 41 wherein the filter is a horizontal filter.

45. (new) The method of claim 41 wherein the filter is a vertical filter.

46. (new) The method of claim 41 wherein the filter is a two-dimensional filter.

47. (new) The method of claim 41 wherein the filter is applied only if the quantization parameter exceeds a predetermined threshold.